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March 1965

THE ROLE OF THE PRIVATE AND STATE
SPHERES IN THE PRODUCTION AND DISTRIBUTION
OF FRUITS AND VEGETABLES IN THE SOVIET UNION

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JUN 24 1965

I. Introduction

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In a recent paper I presented some observations on the marketing of fruits and vegetables in the Soviet Union.^{1/} My comments largely centered about the farmers markets and State stores. At the time I did not have any information that would indicate how important these outlets were in terms of total fruit and vegetable production. Since then, I have checked into the matter and have gathered some data which indicate the role of the private and State spheres in the overall production and distribution of produce.

To quickly review the general situation, fruits and vegetables are raised (1) on the private plots of farmers and rural or suburban residents, and (2) as part of the regular production by the State on collective and State farms. Some of the production of both private and State spheres is retained on the farm for consumption and other uses. That which moves into the marketing sector may be disposed of in one of the following ways: (1) sold on the farmers market (the collective farm market), (2) sold to the State, and (3) other sales. The production procured by the State in turn may be sold at retail, or utilized in factories, the armed forces, etc.

From a practical point of view, those exporting fruits and vegetables to the Soviet Union should recognize that their products would have to move within the State phase of this network. Therefore, a delineation of the extent of this market might well supplement the material presented in my earlier paper relating to the potential for fruit and vegetable exports to the Soviet Union.

The analysis will largely make use of official Soviet data for 1962.^{2/} We shall first look at production, then market distribution, and finally market channels. References mentioned in the text are listed in more complete form at the end of the paper.

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^{1/}Dana G. Dalrymple, Some Observations on the Marketing of Fruits and Vegetables in the Soviet Union, U. S. Department of Agriculture, Federal Extension Service, MUS 167 (Mimeo D-11), October 1964, 12 pp.

^{2/}As reported in Narodnoye khozyaystvo. There is, of course, some question as to how complete the relevant Soviet statistics are (see the papers by Karcz, noted in Section VII/B, for a detailed treatment of this point). Allowance is not made for spoilage or waste, both of which are probably quite high (see p. 10 of my original paper).

II. Production

It appears that in 1962 the private sphere accounted for over 63% of fruit and vegetable production, while the State accounted for nearly 37%. The private sphere was relatively more important in the production of potatoes, while the State was relatively more important in other vegetables and fruits.

In terms of weight, potatoes were by far the most important commodity group - representing some 76% of total production.^{3/} Other vegetables accounted for over 17%, and fruits less than 7%.^{4/} Details are provided in Table 1.

Table 1. Soviet Production of Fruits and Vegetables, 1962

Measures & Sphere	Commodity			
	Total	Fruits	Vegetables	Potatoes
<u>In Millions of Metric Tons</u>				
Private	58.2	2.7	6.7	48.8
State	33.5	3.3	9.3	20.9
Total	91.7	6.0	16.0	69.7
<u>In Percent of Commodity Total</u>				
Private	63.4%	45.0%	42.0%	70.0%
State	36.6	55.0	58.0	30.0
Total	100.0%	100.0%	100.0%	100.0%

Source: Narodnoye khozyaystvo, pp. 234-235, 297.

III. Market Distribution

A surprisingly large quantity of Soviet fruit and vegetable production does not leave the farm. In total, it would appear that in 1962 nearly 74% of production was retained at the farm,^{5/} while over 26% entered into market channels.^{6/} Of that entering the market, nearly 16% was purchased by the

^{3/}1962 was a relatively bad year for potatoes; production during the previous two seasons had accounted for nearly 80% of the total.

^{4/}If it were possible to assess production of value rather than weight, the fruits and other vegetables would undoubtedly rank higher.

^{5/}This is a residual category obtained by subtracting market output from production. Some of this produce may be sold locally (see fn. 12).

^{6/}While this figure is based on official statistics for potatoes and other vegetables, portions of the fruit statistics were not available in the same form and had to be estimated. To be more specific, available fruit data concerned production and State procurements; the rest were estimated (see Table 2). In making the estimates I benefited from suggestions by Abraham Becker (Becker's own estimates, however, differ somewhat from those which I have reported in that they show a higher level of marketed output and a lower level of output retained at the farm).

State, over 8 $\frac{1}{2}$ was sold through farmers markets, and approximately 2% went into other channels.^{7/}

There was a substantial variation within the commodity categories. A particularly high proportion of potatoes was retained at the farm, while other vegetables and fruits showed a much greater tendency to move into market channels.^{8/} For the latter two commodities, State procurements were particularly important. Details are provided in Table 2.

Table 2. Market Distribution of Fruit and Vegetable Production in the Soviet Union, 1962

Measures & Forms of Distribution	Total	Commodity		
		Fruit	Vegetables	Potatoes
<u>Millions of Metric Tons</u>				
Marketed Output	24.1	4.3*	8.4	11.4
State Procurements	14.5	2.9	5.9	5.7
Farmers Markets	7.7	1.0*	1.4	5.3
Other Sales	1.9	0.4*	1.1	0.4
Retained at Farm**	67.6	1.7*	7.6	58.3
Total	91.7	6.0	16.0	69.7
<u>Percent of Commodity Total</u>				
Marketed Output	26.3%	71.7%*	52.5%	16.4%
State Procurements	15.8	48.3	36.9	8.2
Farmers Markets	8.4	16.7*	8.8	7.6
Other Sales	2.1	6.7*	6.9	0.6
Retained at Farm**	73.7	28.3*	47.5	83.6
Total	100.0%	100.0%	100.0%	100.0%

Notes:

*Estimated. To be considered tentative. See text fn. 6.

**Residual category. See text fn. 5.

Sources:

Narodnoye khozyaystvo, pp. 233-235, 239; Karcz, pp. 6, 7, 47.

^{7/}The State category presumably includes what little processing there is. The breakdown between farmers markets and other sales was developed by Karcz (pp. 2, 3). The former category includes commission trade; the latter covers (a) decentralized procurement, (b) deliveries of institutional farms to parent organizations, and (c) distributions to employees. Karcz also coined the expression "market output" which is used in the tables.

^{8/}With respect to the private sector, for instance, Nazarov (p. 56) indicates that in 1961, 50% of the fruit production was sold, while the comparable figure for vegetables was 17%, and that for potatoes was 13%.

While the data suggest that only 8% of overall production was sold through farmers markets, it is not entirely clear what the exact proportion was with respect to State stores. State purchases, it will be recalled, were for all State purposes. It has been estimated by Hanson (p. 204, fn. 42) that the farmers markets and the State stores are about equally important in the retailing of fruits and vegetables. If this holds for 1962, it suggests that about half the State procurements were subsequently retailed.^{9/}

Taken together, then the farmers markets and State stores were less important than might have been realized - accounting perhaps for only 16% of total crop. But it should be remembered that only a small proportion of the crop is marketed and that there is considerable variation between commodity groups.

IV. Market Channels

Having outlined details of the production and initial distribution of fruits and vegetables, we now turn to a consideration of the channels utilized in this process. Of the production represented by the private sphere, for example, how much moved to the farmers market or into other sales outlets?

Although we have official Soviet statistics that indicate the general utilization breakdown and the disposition of production between the private and State spheres, no data appear to exist which indicate the disposition within these groupings. It is, therefore, necessary to turn to a rather crude estimating procedure to fill in the void.

For purposes of clarity, it might be well to present the overall framework with the estimates included. This is done in Table 3.

Table 3. Estimated Market Distribution of Fruits and Vegetables by Private and State Spheres, 1962

Form of Distribution	Total*	Estimated Distribution of Total Production as Represented by	
		Private Sphere	State Sphere
Marketed Output	26%	8%	18%
Farmers Market	8	7	1
State Procurement	16	0	16
Other Sales	2	1	1
Retained on Farm	74	55	19
Total	100%	63%**	37%**

Notes:

*Taken from Table 2. Rounded.

**Taken from Table 1. Rounded.

^{9/}This seems to be confirmed by Soviet data for 1959 which indicate that of the State procurements, about 60% of the vegetables and 40% of the potatoes were allotted for sales to the population (Skovoroda and Grigor'ev, p. 123).

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Estimation of the marketed output sector was relatively straightforward. Essentially all of the State procurements, for example, can be considered to come from the State sphere, and virtually none from private production.^{10/} Similarly, most of the produce sold on the farmers market can be assumed to come from the private sphere; of the 8% sold in this way, 7% was estimated to come from private sources and 1% from the surplus production of the State sector (production above government procurement levels).^{11/} "Other" sales were then arbitrarily divided between the private and State spheres.

Determining the source of produce retained on the farm then became a matter of elimination. Having indicated that of production represented by private production, 7% is sold on the farmers market, we see that 55% is left to be retained on the farm. Similarly, of the 37% of production by the State sphere, 19% is left to be retained. Thus we find that of the 74% of production retained on the farm, 55% came from the private sphere and 19% from the State sphere.^{12/} The ratio between private and State then was about 3 to 1.^{13/}

Obviously this procedure is very rough. Furthermore, the proportions would vary with the commodity grouping. It is to be hoped that it is possible to develop a more sophisticated and a more precise technique for specifying the role of the individual market channels.

V. Summary and Implications

The preceding sections may be briefly summarized in diagramatic form for all fruits and vegetables. This is done in Figure 1 (p. 6).^{14/} The market channel figures are to be considered tentative and are in parentheses.

^{10/}In practice, State procurement organs obtain some private production through intermediate groups such as the State or collective farms, or the commission trade (included in "other sales"). Direct purchases are rare. (Based on discussion with Horbaly.)

^{11/}This suggests, then, that the ratio of private to State sales on the farmers markets (including commission sales) was about 7:1 (or 87.5% vs. 12.5%). Such a ratio would seem to be in line with official data on fruit for 1962 which suggest a breakdown of 88.4% vs. 11.6% (based on data provided by Becker).

^{12/}Most of the produce which is "retained" on the State farms probably represents intrafarm sales to farm workers, spoilage, and use of potatoes for feed and seed. (Based on a discussion with Horbaly.)

^{13/}This would appear to be reasonably close to official data presented by Newth (p. 168) which indicate that the comparable ratio for potatoes in 1959 was about 2 to 1.

^{14/}Actually this diagram is a graphic presentation of Table 3. Each of the three levels - production, market channels, and market disposition - add across to 100%; the individual percentages refer to proportion of total quantity of fruits and vegetables.

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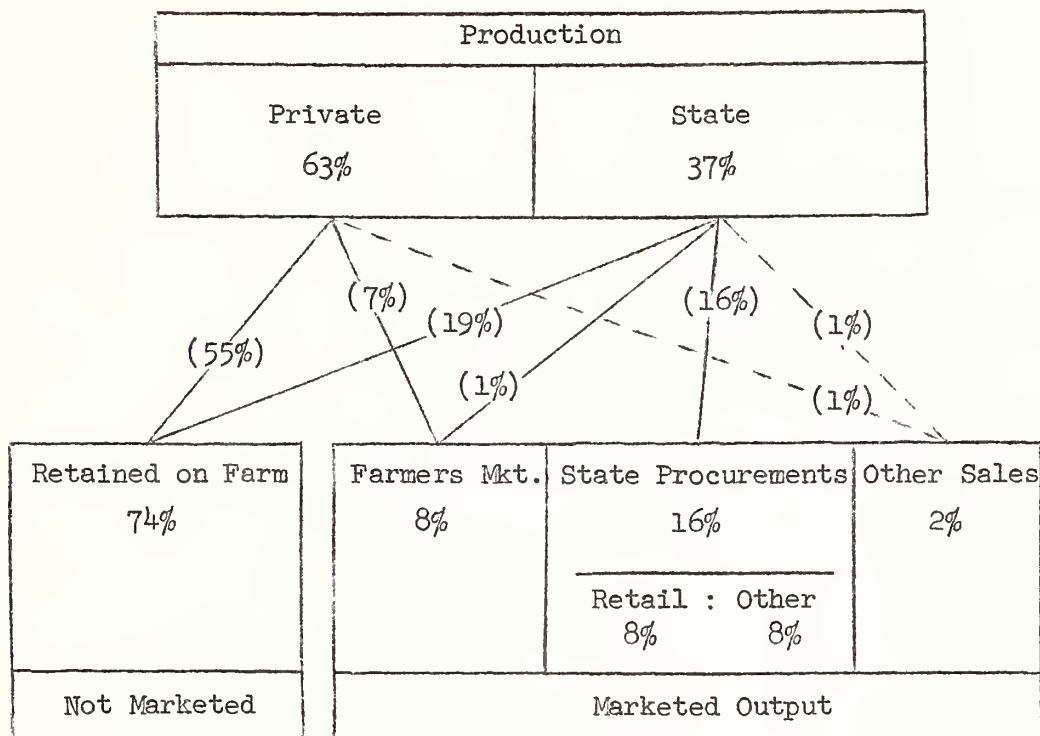
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1955

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Figure 1. Estimated Production and Distribution Pattern for Fruits and Vegetables in the Soviet Union, 1962



In view of the relatively small proportion of production which is actually marketed, it would appear that the Soviet Union in 1962 was largely a subsistence economy with respect to fruits and vegetables. When it is recognized that all fruit and vegetable exports to the Soviet Union would have to go through the State system, it can be seen that a large share of the Soviet market would appear to remain untouched. Part of this situation, however, is due to the dominant role played by potatoes; fruits and/or other vegetables are less important in terms of tonnage but more prone to move through the State system. But in the latter case, the still substantial home production would suggest that demand might be best for out-of-season or more exotic products.

VI. Appendix

Further analysis of the data pertaining to private sales suggests several more specific observations: (1) The previously noted production and marketing channel information indicate that about 13% of the output of the private sector in 1962 (on a weight basis) was sold. Computations using Soviet data (Nazarov, p. 56) show a comparable figure in 1961 of about 15%. (2) To go one step further, my data suggest that about 87% (seven-eighths) of these sales were made on the collective farm market. In 1961, however, Nazarov reports that of all the sales by the private sector, over 70% of the potatoes and only 55% of the fruits went over the collective farm market. My figure, therefore, appears high. Part of the difference may be due to my inclusion of sales to the commission trade; Nazarov probably excludes this item.

VII. References

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^{15/}This reference was brought to my attention by Jerzy Karcz in a letter dated January 20, 1965.

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